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(71) 出願人 591035520

株式会社古都

京都府京都市右京区西京極北大入町32番地

(72) 発明者 山岡 只夫

京都府京都市右京区西京極北大入町32番地

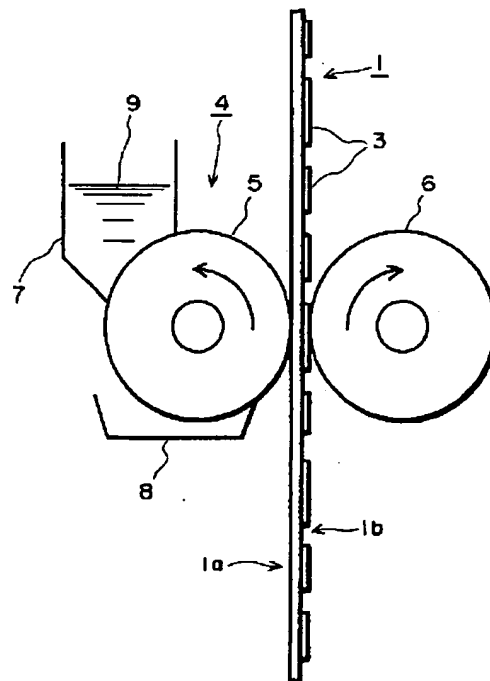
(74) 代理人 弁理士 和田 肇

(54) 【発明の名称】 紋織物の染色方法

(57) 【要約】

【課題】 紋織物の染色方法において、新規な染色方法に加え、製品としての商品価値を向上させる。

【解決手段】 紋柄2を浮織3にした織物生地1の裏面1a側から竹炭粉で構成した染色材9で染色を施し、染色材9を生地1の表面1bまで浸透させないようにして生地1の裏面1a全体を単色に染め上げて紋柄を浮き立たせるようにする。



【特許請求の範囲】

【請求項1】 紋柄を浮織にした紋織物の織物生地裏面側から染色材で染色を施し、前記染色材を織物生地の表面まで浸透させないようにして織物生地の裏面全体を単色に染め上げて紋柄を浮き立たせるようにした染色方法において、前記染色材は竹炭粉であることを特徴とする紋織物の染色方法。

【請求項2】 紋柄を浮織にした紋織物の織物生地裏面側から染色材で染色を施し、前記染色材を織物生地の表面まで浸透させないようにして織物生地の裏面全体を単色に染め上げて紋柄を浮き立たせるようにした染色方法において、前記染色材は竹炭粉と任意の着色剤を混合したものであることを特徴とする紋織物の染色方法。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は染色方法、さらに詳しくは紋柄を浮織にした紋織物の染色方法に関するものである。

【0002】

【従来の技術】従来、一般に織物の染色方法として、生地を染料液中に浸して染色する浸染、生地に口ウで模様を描いて染料を刷毛等で引き染める口ウ染め、生地を糸でくくって種々の模様を染め出す絞り染め、或いは型紙や手描き友禅染等が知られている。

【0003】ところで、生地に模様（紋柄）を浮織（ふくれ織）にした紋織物の染色方法の1つとして、手描き友禅がある。この染色方法は、生地の紋柄を図案紙（絵摺り紙）に基づいて、全て手描きで染め上げるものであり、この方法によれば豪華な芸術的価値のある稀少な一品作品が得られる。しかるに、この手描き友禅によると、1つの反物を染め上げるまでに数カ月、或いは1年以上もかかってしまうので、生産性が悪いと共に、きわめて高価になる問題を有している。

【0004】紋織物の他の染色方法として、型紙を使用して染色する方法がある。この染色方法は、生地の紋柄（地模様）の図案紙（絵摺り紙）に基づき、図案紙の紋柄の中から選択した模様等に合わせ型紙原紙を彫って作成した型紙を必要枚数用意し、この型紙を使用して型紙友禅のように染色するものである。この方法によれば、手描き友禅に比べ染め上げ時間を一応短縮することができる。

【0005】しかしながら、紋柄が生地の全面に亘って連続模様状に施されている場合、この生地を型紙友禅のように型紙を使用して、紋柄どりに正確に染め上げるのは、きわめて難作業であり、これは、本発明者が先に開発した特公昭64-5111号公報に記載のように、織物生地を精錬処理する前に染色する特殊な染色技術によって初めて可能になったものであるが、この方法によっても、染色後、生地を精錬処理する際に染色が薄くなる問題を有している。また、この染色方法は多数の型紙を

作る必要があるため、型紙の作成に手間が掛かると共に、型紙では、ボカシや濃淡を出すことができない等の問題も有している。

【0006】従来の紋織物の染色方法は上述したように、いずれも織物生地の表面側に染色を施して行われ、これが当業界では常識となっていた。

【0007】そこで、本発明者は紋織物の染色方法における我が国の伝統的常識を打ち破り、新規斬新的な紋織物の染色方法を開発した（特開平6-184959号公報参照）。この染色方法（以下、「先行発明」という）は、紋柄を浮織にした紋織物の織物生地裏面側から所望色の染色材で染色を施し、織物生地の表面まで染色材を浸透させないようにして織物生地の裏面全体を単色に染め上げて紋柄を浮き立たせるようにしたものである。

【0008】先行発明は上記のように生地の裏面側から染色を施して生地の裏面全体を単色に染め上げるものであるから生産性は向上し、かつ、生地の表面まで染色材を浸透させないようにして染色するものであり、紋織物は生地の無地の部分は薄く、紋柄の部分は生地の表面に高低の段差を形成して盛り上がり肉厚になっているため、この生地に対して裏面から均一に染めると、生地の表面側は必然的に濃淡の差が生じて染まることになる。つまり生地の肉厚の部分は濃く染まると共に肉厚になるにしたがって、次第に淡くなり、白色に近づいて染まる。そのため、紋柄が生地の表面にくっきり浮き上がって見えるようになる。また、濃淡により、ボカシ模様も表現されることになる。この染色方法により染め上げた生地は染色する色により、それぞれ独自のもち味を発揮するが、たとえば黒色の染色材で染色すると、無地の部分は銀色に輝いて染まるため、光沢をもつ銀色地に紋柄が浮き立って見えるので、雅びやかな反物作品が得られる。このように、先行発明によれば従来法とは全く異なる染色方法が得られる。

【0009】

【発明が解決しようとする課題】本発明は前記先行発明による染色方法の特長をそのまま活用し、これに加えて製品としての染色紋織物の商品価値を向上させ得る新規な紋織物の染色方法を提供することを目的とするものである。

【0010】

【課題を解決するための手段】本発明者は上記の目的を達成するために鋭意研究を重ねた結果、竹炭を粉砕して粉末化（微粒子化）することにより染色材として適応できることを見出し、本発明を完成するに至った。

【0011】即ち、本発明のうちの1つの発明は、紋柄を浮織にした紋織物の織物生地裏面側から染色材で染色を施し、前記染色材を織物生地の表面まで浸透させないようにして織物生地の裏面全体を単色に染め上げて紋柄を浮き立たせるようにした染色方法において、前記染色材は竹炭粉であることを特徴とするものである。

【0012】竹炭は防虫・防腐・消臭・殺菌作用、マイナスイオンの発生による空気浄化作用、遠赤外線発生による健康促進作用等の優れた特性を有している。本発明はこの竹炭を粉末化したものを使用するものである。本発明に使用される竹炭粉の粒度としては、例えば一般に使用されている顔料と同程度の範囲を例示でき、粒子の大きさによって風合いや光沢等の特性を調整することができる。

【0013】本発明に使用される竹炭の竹の種類は限定されるものではなく、任意の竹を採用できる。竹炭の製造は例えば通常の本炭と同様の方法で炭焼きしたものを採用できる。また、染色手段としては特に限定されないで任意の方法を採用できるが、例えばロール間に織物生地を通過させて染色する機械捺染方式等が簡便な方法として挙げられる。

【0014】上記染色方法によれば、竹炭粉を用いた染色材で織物生地の表面まで浸透させないようにして裏面全体を染めるものであるから、生地の裏面側は黒色系に染色されるが、生地の表面側は紋柄の部分と無地の部分とにより必然的に濃淡の差が生じて染まることになる。つまり、生地の肉厚の部分（無地の部分）は濃く染まると共に肉厚になるにしたがって次第に淡くなり、白色に近づいて染まる。そのため、紋柄が生地の表面にくっきり浮き上がって見えるようになると共に濃淡によりボカシ模様も表現される。特に無地の部分は銀色に輝いて染まるため光沢をもつ銀色地に紋柄が浮き立って見えるので、雅びやかな織物作品が得られる。また、染色材として竹炭粉を使用しているので、上記により染色された紋織物は防虫・防腐・消臭・殺菌作用、空気浄化作用、遠赤外線による健康促進作用等の優れた効果を発揮する。

【0015】本発明のうちの他の1つの発明は、紋柄を浮織にした紋織物の織物生地の裏面側から染色材で染色を施し、前記染色材を織物生地の表面まで浸透させないようにして織物生地の裏面全体を単色に染め上げて紋柄を浮き立たせるようにした染色方法において、前記染色材は竹炭粉と任意の着色剤を混合したものであることを特徴とするものである。

【0016】ここで、本発明のこの明細書において「着色剤」とは、染料、顔料、松煙その他の木煙、油煙、木炭粉、その他繊維の着色（染色）に使用し得る全ての物質を含む広い概念とする。前記染料としては天然染料及び化学合成染料があり、また、前記顔料としては無機顔料及び有機顔料があり、本発明はこれらを全て含む。なお、竹炭粉も前記着色剤の概念に含まれることになるが、ここでは便宜上、竹炭粉は着色剤の中に含まれないものとする。

【0017】前記本発明のうちの他の1つの発明に使用される染色材は竹炭粉と前記のような着色剤の中から選択した任意の着色剤を混合することによって調製される。この場合、着色剤は前記例示したようなものの中

ら一種類選択し、これと竹炭粉を混合し、或いは二種類以上選択し、これと竹炭粉を混合する等、自由に行えるものである。また、着色剤の色は自由に選定することができる。

【0018】本発明において、前記染色材を構成する竹炭粉と着色剤との混合割合は特に限定されるものではなく、任意に選定することができ、竹炭粉と着色剤との混合比率及び着色剤の色の選定により、それぞれ独自のもち味を有する染色材が得られる。

【0019】本発明のうちの前記他の1つの発明は竹炭粉と着色剤を混合した染色材を使用して前記した第1の発明と同様の方法によって染色するもので、この染色方法によれば、前記第1の発明の作用効果に加え、染色する色を好みに応じて変えることができるので、任意の色に染色した織物作品が得られる。

【0020】

【発明の実施の形態】以下、図面を参照して本発明の実施の形態の一例を説明する。図1は本発明の紋織物の染色方法により染色している状態の一実施の形態の概要を示す説明図、図2は同方法により染色する織物生地の一部を示す平面図、図3は同方法による織物生地の染色状態を示す説明図であって、同図aは染色前、同図bは染色後を示す。

【0021】これら図1～図3において、1は所望の模様や図柄等の紋柄2を浮織3（ふくれ織）にして織り上げた紋織物の織物生地で、この実施の形態では紋柄2を生地1の全面に亘り連続模様状に織り上げてある。この生地1を染色するもので、生地1は織成後、あらかじめ精練、漂白処理して乾燥しておく。

【0022】4は捺染機（染色機）を示し、この実施の形態の捺染機4は金属製の捺染ロール5と、このロール5と相対して設けたゴム製の押さえロール6を有している。7は捺染ロール5側に設けた染色材タンク、8は捕集用の受け皿で、タンク7内に染色に使用する染色材9を入れる。

【0023】本発明のうちの1つの発明は染色材9として竹炭粉を使用し、この竹炭粉よりなる染色材9を生地1の表面まで浸透させないようにして染色するものである。この竹炭粉は例えば次のようにして製造する。即ち、任意の種類の竹炭を適当な粒度（例えば5～20ミクロン程度、但しこの粒度に限定するものではない）に粗粉碎し、これを洗浄して酸で中和した後、分散剤を加えて湿式法で所定の粒度に粉碎して竹炭粉を得る。

【0024】前記洗浄は水溶性成分（主にアルカリ成分）を除去するもので、具体的には例えば前記粗粉碎した竹炭を容器に入れ、水を加えて攪拌して静置した後、上澄みを取り除き、この操作を数回繰返すことにより行なえる。また、分散剤としては例えばノニオン（非イオン）系やアニオン（陰イオン）系のものを例示できる。

【0025】前記竹炭粉は染着性がないため、固着剤と

混合して染色材とする。この固着剤としては、アクリル系樹脂等の樹脂エマルジョン等が挙げられる。固着剤と竹炭粉の混合比率は任意に設定するものであるが、両者の混合比率によって、風合いや染色される色の濃度等を調整することができる。

【0026】そこで、前記染色材9をタンク7に入れ、生地1の裏面1a側を捺染ロール5側に向け、設定速度で回転する両ロール5、6間に挟入して通過させて染色する。これにより生地1は生地1の表面1bまで染色材9を浸透させないで裏面1a全体が竹炭粉の色（黒系の色）で均一かつ単色に染色される（図3a参照）。次いで、前記染色した生地1を乾燥して製品とする。この場合、所望に応じ、前記乾燥処理した後、この生地1を適当な温度でベーキング処理を施すこともできる。

【0027】なお、本発明においては所望に応じ、前記工程により生地1を染色した後、この織物生地1の紋柄2の所望部位を毛筆等で所望色を色挿して仕上げることも自由である。

【0028】本発明のうちの他の1つの発明は染色材9として竹炭粉と任意の着色剤を混合して調製し、この染色材9を使用して前記と同様の工程により染色するもので、染色後の後処理等についても同様に行える。なお、竹炭粉と混合する着色剤として染料を採用する場合には、染色した生地1を蒸熱処理して水洗いした後乾燥するとよい。

【0029】前記竹炭粉と着色剤との混合比率及びこの混合組成物と固着剤或いは媒染剤との混合比率は任意に設定でき、また、前記各材料の混合比率並びに着色剤の色の選択によって夫々の特性を有する染色織物が得られる。

【0030】

【実施例】次に本発明方法により実験した例を実施例として示す。なお、下記の実施例はその一例として開示したもので、本発明を限定するものではないこと勿論のことである。

【0031】実施例1

竹炭粉5重量%、及びアクリル樹脂エマルジョン95重量%を混合して攪拌し、染色材とする。この染色材を使用し、紋織物の織物生地を図1の実施の形態で処理して染色し、この染色した織物生地を乾燥して製品（染色織物）を得た。

【0032】上記により織物生地1の裏面は黒に近い灰色に染色され、裏面側は光沢はないが、生地1の表面側は無地の部分は銀色に輝いて染められ、濃淡によりボカシ模様も表現されると共に光沢をもつ銀色地に紋柄が浮き立って見えるので、雅びやかな染色織物作品が得られた。また、この織物は染色材として竹炭粉を使用しているので、防虫・防腐・消臭・殺菌作用、空気浄化作用、遠赤外線発生による健康促進作用等の優れた作用を有している。

【0033】実施例2

竹炭粉を10重量%に増量する以外は実施例1と同一の方法で実施して染色織物を得た。この織物生地1の裏面は実施例1よりさらに黒に近い灰色に染色され、この実施例2の製品も実施例1と同様の成果が得られた。

【0034】実施例3

竹炭粉5重量%、顔料（赤色）5重量%、及びアクリル樹脂エマルジョン90重量%を混合して攪拌し、染色材とする。この染色材を使用し、実施例1と同一の方法で実施して染色織物を得た。

【0035】上記により織物生地1の裏面は茶色に染色され、表面側は生地1の肉厚の部分（無地の部分）は濃く染まると共に紋柄の部分は肉厚になるにしたがって次第に淡くなり、白色に近づいて染まり、紋柄が生地1の表面にくっきり浮き上がって見えるようになり、また、濃淡によりボカシ模様も表現されるので、優れた染色織物作品が得られた。また、この織物も竹炭粉を使用しているので、実施例1と同様に竹炭による作用を奏する。

【0036】実施例4

竹炭粉5重量%、赤色の染料（化学合成染料）5重量%、及びアクリル樹脂エマルジョン90重量%を混合して攪拌し、染色材とする。この染色材を使用し、実施例1と同様な方法（但し、染色後、乾燥処理する前に生地を蒸熱処理して水洗いする）で実施して染色織物を得た。この作品も実施例3と同様の成果が得られた。

【0037】なお、上述した実施例（実施例3及び4）では顔料及び染料として赤色のものを採用した例を開示したが、赤色以外の任意の色を採用できること勿論である。また、染色した織物生地を乾燥処理した後、所望に応じてベーキング処理を施すことも自由である。

【0038】

【発明の効果】本発明によれば次のような効果を奏する。①織物生地1の裏面側から染色材で染色を施して生地1の裏面全体を単色で染め上げるものであるから生産性は向上し、かつ、濃淡及びボカシ模様を正確に表出し、紋柄を生地1の表面に浮き立たせることができる。②染色材に竹炭粉を使用しているので、染色された紋織物は防虫・防腐・消臭・殺菌作用、遠赤外線の発生による健康促進作用等の優れた効果を奏し、これにより染色紋織物の商品価値を向上させる。③請求項2記載の発明によれば、前記の効果に加え、染色する色を好みに応じて変えることができるので、任意の色に染色した織物作品が得られる。

【図面の簡単な説明】

【図1】本発明の紋織物の染色方法により染色している状態の一実施の形態の概要を示す説明図。

【図2】同上方法により染色する織物生地の一部を示す平面図。

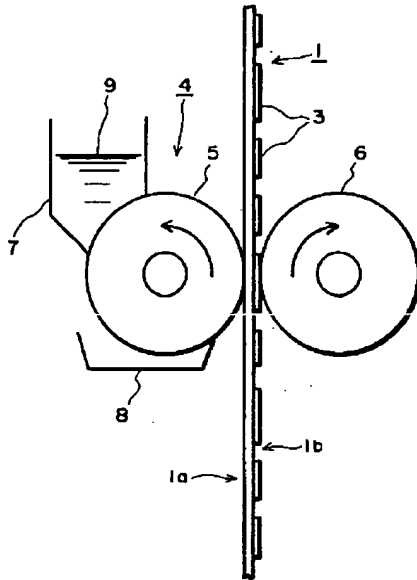
【図3】同上方法による織物生地1の染色状態を示す説明図であって、同図aは染色前、同図bは染色後を示す。

【符号の説明】

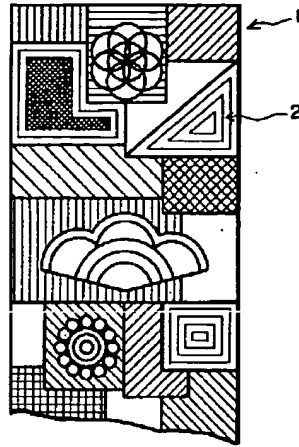
- 1 織物生地
2 紋柄

- 3 浮織
9 染色材

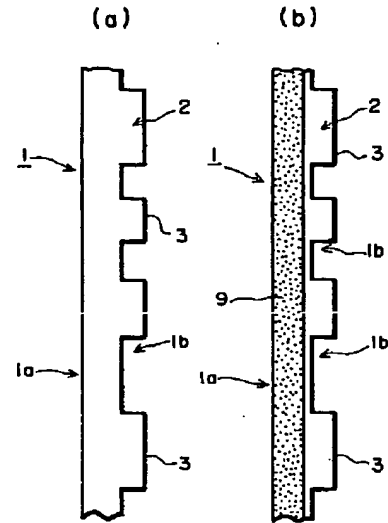
【図1】



【図2】



【図3】



PATENT ABSTRACTS OF JAPAN

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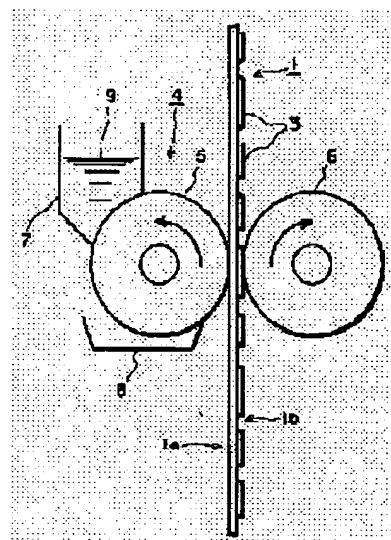
(21)Application number : 09-316450 (71)Applicant : KOTO:KK
(22)Date of filing : 31.10.1997 (72)Inventor : YAMAOKA TADAO

(54) DYEING OF FIGURED CLOTH

(57)Abstract:

PROBLEM TO BE SOLVED: To improve a commercial value as a product in addition to new dyeing method in a method for dyeing figured cloth.

SOLUTION: The rear side 1a of woven fabric 1 in which the design is formed as float weave 3 is dyed with a dyeing material 9 composed of a bamboo coal powder and whole rear side 1a of the fabric is dyed into a single color while keeping the surface 1b of the fabric so as not to permeating the dyeing material 9 up to the surface 1b of the fabric 1 to emboss the design.



LEGAL STATUS

[Date of request for examination]
[Date of sending the examiner's decision of rejection]
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]
[Date of final disposal for application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

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CLAIMS

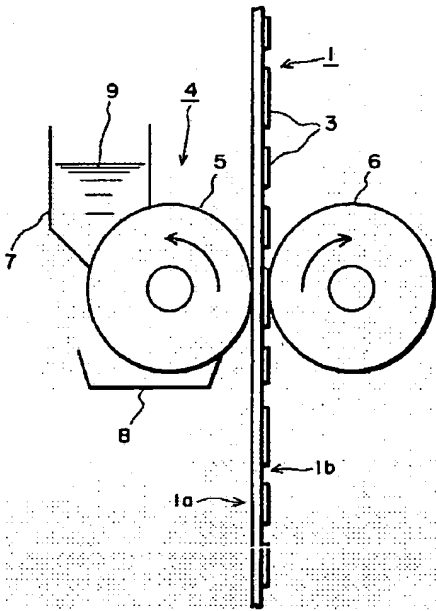
[Claim(s)]

[Claim 1] the textiles of the brocade object which made **** **** -- the rear-face side of the ground to dyeing material -- dyeing -- giving -- said dyein material -- textiles -- it permeates to the front face of the ground -- not making -- making -- textiles -- the dyeing approach of the brocade object characterized by said dyeing material being bamboo coal powder in the dyeing approach in which finish dyeing the whole rear face of the ground in monochrome, and it was made to float **** up.

[Claim 2] the textiles of the brocade object which made **** **** -- the rear-face side of the ground to dyeing material -- dyeing -- giving -- said dyein material -- textiles -- it permeates to the front face of the ground -- not making -- making -- textiles -- the dyeing approach of the brocade object characterized by for said dyeing material to mix the coloring agent of arbitration with bamboo-coal powder in the dyeing approach in which finish dyein the whole rear face of the ground in monochrome, and it was made float **** up.

[Translation done.]

Drawing selection [Representative drawing]



[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the dyeing approach and the dyeing approach of the brocade object which made **** in more det

[0002]

[Description of the Prior Art] A pattern is drawn on the dyeing which generally dips and dyes the ground into color liquid as the dyeing approach of textiles conventionally, and the ground in a low, and the batik which lengthens and dyes a color with the brush etc., the variegation which bundles the ground with yarn and begins to dye various patterns, a paper pattern, a Yuzen-style-of-dyeing-with-hand-drawn-patterns stain, etc. are known.

[0003] By the way, the Yuzen style of dyeing with hand-drawn patterns is in the ground as one of the dyeing approaches of the brocade object which ma the pattern (****) **** (swelling **). This dyeing approach finishes dyeing **** of the ground by hand-drawn altogether based on design paper (*****), and according to this approach, a rare one-article work with gorgeous artistic merit is obtained. However, since according to this Yuzen sty of dyeing with hand-drawn patterns it will take several months or one year or more before finishing dyeing one bolt of cloth, while productivity is bad, i has the problem which becomes very expensive.

[0004] There is the approach of dyeing as other dyeing approaches of a brocade object using a paper pattern. This dyeing approach is doubled with a pattern that it chose from **** of design paper etc., based on the design paper (*****) of **** (base design) of the ground, carries out need number-of-sheets preparation of the paper pattern which carved and created paper pattern stencil paper, and dyes it like paper pattern yuzen using this paper pattern. According to this approach, compared with the Yuzen style of dyeing with hand-drawn patterns, it can finish dyeing, and time amount ca be shortened once.

[0005] However, using a paper pattern and finishing dyeing this ground correctly to ***** like paper pattern yuzen, when **** continues all over the ground and is given in the shape of a continuation pattern JP,64-511,B to which it is a difficulty activity very much and this invention person developed this previously – a publication – like – textiles, although it will not become possible without the special dyeing technique dyed before carryi out refinement processing of the ground Also by this approach, after dyeing, in case refinement processing of the ground is carried out, it has the proble to which dyeing becomes thin. Moreover, it also has the problem of being able to take out neither BOKASHI nor a shade by the paper pattern while it requires time and effort for creation of a paper pattern, since this dyeing approach needs to make many paper patterns.

[0006] the dyeing approach of the conventional brocade object was mentioned above – as – any – textiles – it was carried out by having dyed it the front-face side of the ground, and this had become common sense in this industry.

[0007] Then, this invention person smashed the traditional common sense of our country in the dyeing approach of a brocade object, and developed the dyeing approach of a new new brocade object (refer to JP,6-184959,A). the textiles of the brocade object with which this dyeing approach (henceforth "precedence invention") made **** – the dyeing material of the rear-face side of the ground to a request color – dyeing – giving – textiles – dyei material is permeated to the front face of the ground – not making – making – textiles – it finishes dyeing the whole rear face of the ground in one colo and is made to float **** up

[0008] Since precedence invention performs dyeing from the rear-face side of the ground as mentioned above and it finishes dyeing the whole rear face the ground in monochrome, productivity improves. And since dyeing material is made [do not make it permeate it and] and dyed to the front face of th ground, and the part of the solid color of the ground of a brocade object is thin, the part of **** forms the level difference of height on the surface of the ground, it rises and it is thick, When it is dyed homogeneity from a rear face to this ground, the difference of a shade will arise inevitably and the front-face side of the ground will dye. That is, the part of closing in of the ground becomes light gradually, approaches white and dyes as it becomes thic while it dyes deeply. Therefore, **** has come floating distinctly on the surface of the ground, and it comes to be visible. Moreover, a BOKASHI patte will also be expressed by the shade. since it shines silver and it dyes, and **** floats up in the silver ground with gloss and the ground which it finishe dyeing by this dyeing approach is in sight as for a plain part by the color to dye, when it dyes, for example by black dyeing material although it demonstrates the respectively original rice cake taste – **** and kana – a bolt of cloth – a work is obtained. Thus, according to precedence invention, completely different dyeing approach from a conventional method is acquired.

[0009]

[Problem(s) to be Solved by the Invention] This invention utilizes the features of the dyeing approach by said precedence invention as it is, and aims at offering the dyeing approach of the new brocade object which may raise the commodity value of the dyeing brocade object as a product in addition to th

[0010]

[Means for Solving the Problem] this invention person came to complete a header and this invention for the ability to be adapted as dyeing material by grinding and carrying out disintegration (atomization) of the bamboo coal, as a result of repeating research wholeheartedly, in order to attain the above-mentioned purpose.

[0011] namely, the textiles of the brocade object with which one invention in this invention made **** – the rear-face side of the ground to dyein material – dyeing – giving – said dyeing material – textiles – it permeates to the front face of the ground – not making – making – textiles – in the dyeing approach in which finish dyeing the whole rear face of the ground in monochrome, and it was made to float **** up, said dyeing material is characterized by being bamboo coal powder.

[0012] Bamboo coal has the property which was [operation / by far-infrared generating / insect control, preservation from decay, deodorization and the

germicidal action, the air cleaning operation by generating of an anion, / health promotion] excellent. This invention uses what carried out disintegration of this bamboo coal. The range comparable as the pigment currently generally used as a grain size of the bamboo coal powder used for this invention, for example can be illustrated, and the magnitude of a particle can adjust properties, such as aesthetic property and gloss.

[0013] The class of bamboo of the bamboo coal used for this invention is not limited, and can adopt the bamboo of arbitration. Manufacture of bamboo coal can adopt what carried out the charcoal burner by the same approach as usual charcoal. moreover – although the approach of arbitration can be adopted without being limited especially as a dyeing means – for example, between rolls – textiles – the machine-printing method which is made to pass through the ground and is dyed is held as a simple approach.

[0014] the dyeing material using bamboo coal powder according to the above-mentioned dyeing approach – textiles – although the rear-face side of the ground is dyed a black system since the whole rear face is dyed as it is not made to permeate to the front face of the ground, the difference of a shade will arise inevitably by the part of ****, and the plain part, and the front-face side of the ground will dye. That is, the part (plain part) of closing in of the ground becomes light gradually as it becomes thick while dyeing deeply, approaches white and dyes. Therefore, a BOKASHI pattern is also expressed by the shade, while **** has come floating distinctly on the surface of the ground and it comes to be visible. Since especially a plain part shines silver, and dyes and it is [**** floats up in the silver ground with gloss and] visible, **** and a kana textiles work are obtained. Moreover, since bamboo coal powder is used as dyeing material, the brocade object dyed by the above demonstrates the outstanding effectiveness, such as insect control, preservation from decay, deodorization and a germicidal action, an air cleaning operation, and a health promotion operation by far infrared rays.

[0015] It dyes by dyeing material from the rear-face side of the ground. the textiles of the brocade object with which other one invention in this invention made **** – said dyeing material – textiles – it permeates to the front face of the ground – not making – making – textiles – in the dyeing approach in which finish dyeing the whole rear face of the ground in monochrome, and it was made to float **** up, said dyeing material is characterized by mixing the coloring agent of arbitration with bamboo coal powder.

[0016] Here, in this specification of this invention, it considers as the large concept containing **** of a color, a pigment, and turpentine soot and other lamp soot, charcoal powder, and all the other matter that can be used for coloring (dyeing) of fiber with a "coloring agent." There are natural dye and a chemosynthesis color as said color, and there are an inorganic pigment and an organic pigment as said pigment, and this invention contains these all. In addition, although bamboo coal powder will also be contained in the concept of said coloring agent, bamboo coal powder shall not be contained in a coloring agent for convenience here.

[0017] The dyeing material used for other one invention in said this invention is prepared by mixing with bamboo coal powder the coloring agent of the arbitration chosen from the above coloring agents. In this case, one kind of coloring agent is chosen from said things which were illustrated, and mixes bamboo coal powder with this, or chooses it two or more kinds, and mixing this and bamboo coal powder etc. can perform it freely. Moreover, the color a coloring agent can be selected freely.

[0018] that to which especially the mixed rate of the bamboo coal powder and the coloring agent which constitute said dyeing material is limited in this invention – it is not – arbitration – it can select – the mixing ratio of bamboo coal powder and a coloring agent – the dyeing material which has a respectively original rice cake taste is obtained by selection of a rate and the color of a coloring agent.

[0019] the inside of this invention – said – others – since the color which dyes one invention by the same approach as said 1st invention carried out using the dyeing material which mixed the coloring agent with bamboo coal powder, and is dyed [according to this dyeing approach] in addition to the operation effectiveness of said 1st invention is changeable according to liking, the textile work dyed the color of arbitration is obtained.

[0020]

[Embodiment of the Invention] Hereafter, an example of the gestalt of operation of this invention is explained with reference to a drawing. the explanatory view showing the outline of the gestalt of the 1 operation in the condition of dyeing drawing 1 by the dyeing approach of the brocade object of this invention, and the textiles which drawing 2 is dyed by the approach same as the above – textiles according [the top view and drawing 3 which show a part of ground] to an approach same as the above – it is the explanatory view showing the dyeing condition of the ground, and, as for this drawing a, the drawing b shows the dyeing back before dyeing.

[0021] the textiles of the brocade object which 1 made **** 2, such as a desired pattern and a pattern, **** 3 (swelling **), and was finished weaving these drawing 1 - drawing 3 – it is the ground, and with the gestalt of this operation, **** 2 is continued all over the ground 1, and it has finished weaving in the shape of a continuation pattern. This ground 1 is dyed, after ****, beforehand, the ground 1 is refined, and bleaching processing is carried out and it is dried.

[0022] 4 shows a printing machine (dyeing machine) and the printing machine 4 of the gestalt of this operation has the presser-foot roll 6 made of rubber which faced the metal printing roll 5 and this roll 5, and was formed. The dyeing material tank which prepared 7 in the printing roll 5 side, and 8 are the saucers for uptake, and the dyeing material 9 used for dyeing is put in in a tank 7.

[0023] One invention in this invention uses bamboo coal powder as dyeing material 9, and makes [it does not make it permeate it and] and dyes the dyeing material 9 which consists of this bamboo coal powder to the front face of the ground 1. This bamboo coal powder is manufactured as follows, for example. That is, after carrying out coarse grinding of the bamboo coal of the class of arbitration to a suitable grain size (for example, it does not limit to about 5-20 microns, however this grain size), washing this and an acid's neutralizing, a dispersant is added, it grinds to a grain size predetermined with wet method, and bamboo coal powder is obtained.

[0024] Said washing removes water-soluble materials (mainly alkali component), specifically puts said bamboo coal which carried out coarse grinding in a container, and after it adds water and it agitates and puts it, it removes a supernatant, and it can be performed by repeating this actuation several times. Moreover, as a dispersant, the thing of for example, the Nonion (non-ion) system or an anion (anion) system can be illustrated.

[0025] Since said bamboo coal powder does not have dyeing property, it mixes with a binder and let it be dyeing material. Resin emulsions, such as acrylic resin, etc. are mentioned as this binder. Although the mixed ratio of a binder and bamboo coal powder is set as arbitration, both mixed ratio can adjust aesthetic property, the concentration of a color dyed.

[0026] Then, put said dyeing material 9 into a tank 7, turn the rear-face 1a side of the ground 1 to a printing roll 5 side, and it is made to insert and pass between both the rolls 5 that rotate at a setting rate, and 6, and dyes. Thereby, the whole rear-face 1a is dyed homogeneity and monochrome by the color (color of a black system) of bamboo coal powder without the ground's 1 making the dyeing material 9 permeate to surface 1b of the ground 1 (refer to drawing 3 a). Subsequently, said dyed ground 1 is dried and it considers as a product. In this case, according to a request, after [said] carrying out desiccation processing, baking processing can also be performed for this ground 1 at suitable temperature.

[0027] in addition, these textiles after said process dyes the ground 1 according to a request in this invention – it is also free to **** a request color and

finish the request part of **** 2 of the ground 1 with a brush etc.

[0028] Other one invention in this invention mixes and prepares bamboo coal powder and the coloring agent of arbitration as dyeing material 9, dyes th according to the same process as the above using this dyeing material 9, and can be similarly performed about the after treatment after dyeing. In additi when adopting a color as a coloring agent mixed with bamboo coal powder, it is good to dry, after carrying out steaming processing and washing the dye ground 1 in cold water.

[0029] the mixing ratio of said bamboo coal powder and coloring agent – a mixing ratio with a rate and this mixed constituent, a binder, or a mordant - rate – arbitration – it can set up – moreover, the mixing ratio of each of said ingredient – the dyeing textiles which have each property by selection of t color of a coloring agent in a rate list are obtained.

[0030]

[Example] Next, the example in which it experimented by this invention approach is shown as an example. in addition, it is not what the following example is what was indicated as the example, and limits this invention – it is a matter of course.

[0031] 5 % of the weight of example 1 bamboo-coal powder and 95 % of the weight of acrylic resin emulsions are mixed and agitated, and it considers dyeing material. this dyeing material – using it – the textiles of a brocade object – the gestalt of operation of the ground of drawing 1 – processing – dyeing – these dyed textiles – the ground was dried and the product (dyeing textiles) was obtained.

[0032] the above – textiles – since **** floated up in the silver ground which has gloss while a plain part shines silver in the front-face side of the ground, and it dyes although it is dyed gray with the rear face of the ground near black and a rear-face side is lusterless, and a BOKASHI pattern is also expressed by the shade and it was visible, the **** and kana dyeing textiles work was obtained. Moreover, since these textiles are using bamboo coal powder as dyeing material, it has the outstanding operations, such as insect control, preservation from decay, deodorization and a germicidal action, an cleaning operation, and a health promotion operation by far-infrared generating.

[0033] Except increasing the quantity of example 2 bamboo-coal powder to 10% of the weight, it carried out by the same approach as an example 1, and dyeing textiles were obtained. these textiles – the rear face of the ground was dyed the gray still nearer to black from the example 1, and the result as a example 1 in which the product of this example 2 was also the same was obtained.

[0034] 5 % of the weight of example 3 bamboo-coal powder, 5 % of the weight (red) of pigments, and 90 % of the weight of acrylic resin emulsions are mixed and agitated, and it considers as dyeing material. This dyeing material was used, it carried out by the same approach as an example 1, and dyeing textiles were obtained.

[0035] the above – textiles – the dyeing [to which the part of **** becomes thick while the rear face of the ground is dyed brown and the part (plain part) of closing in of the ground dyes deeply in a front-face side] textiles work which was excellent since it was alike, it followed, became gradually lig approached white, dyed, **** had come floating distinctly on the surface of the ground, and it came to be visible and the BOKASHI pattern was also expressed by the shade was obtained. Moreover, since these textiles are also using bamboo coal powder, the operation by bamboo coal is done so like a example 1.

[0036] 5 % of the weight of example 4 bamboo-coal powder, 5 % of the weight (chemosynthesis color) of red colors, and 90 % of the weight of acrylic resin emulsions are mixed and agitated, and it considers as dyeing material. This dyeing material was used, it carried out by the same approach (howev after dyeing, before carrying out desiccation processing, steaming processing is carried out and the ground is washed in cold water) as an example 1, an dyeing textiles were obtained. The result as an example 3 in which this work was also the same was obtained.

[0037] in addition, a thing employable [the color of arbitration other than red] although the example which adopted the red thing as a pigment and a co was indicated in the example (examples 3 and 4) mentioned above – it is natural. moreover, the dyed textiles – after carrying out desiccation processin of the ground, it is also free to perform baking processing according to a request.

[0038]

[Effect of the Invention] According to this invention, the following effectiveness is done so. ** textiles – since it dyes by dyeing material from the rear-face side of the ground and finishes dyeing the whole rear face of the ground in one color, productivity improves, and expresses a shade and a BOKASHI pattern correctly, and can float **** up on the surface of the ground. ** Since bamboo coal powder is used for dyeing material, the dyed brocade object does so the outstanding effectiveness, such as insect control, preservation from decay, deodorization and a germicidal action, and a health promotion operation by generating of far infrared rays, and, thereby, raises the commodity value of a dyeing brocade object. ** Since the color to dye is according to invention according to claim 2] changeable according to liking in addition to the aforementioned effectiveness, the textile work dyed the color of arbitration is obtained.

[Translation done.]